

United States Marine Corps
Command and Staff College
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2076 South Street
Marine Corps Combat Development Command
Quantico, Virginia 22134-5068

MASTER OF MILITARY STUDIES

The Battle of Vukovar: The Battle That Saved Croatia

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MILITARY STUDIES

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AY 01-02

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REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 01-07-2002		2. REPORT TYPE Student research paper		3. DATES COVERED (FROM - TO) xx-xx-2001 to xx-xx-2002	
4. TITLE AND SUBTITLE The Battle of Vukovar: The Battle That Saved Croatia Unclassified				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Sebetovsky, Mario ;				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME AND ADDRESS USMC Command and Staff College 2076 South Street MCCDC Quantico, VA22134-5068				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME AND ADDRESS USMC Command and Staff College 2076 South Street MCCDC Quantico, VA22134-5068				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT APUBLIC RELEASE					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT See report.					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:		17. LIMITATION OF ABSTRACT Public Release	18. NUMBER OF PAGES 66	19. NAME OF RESPONSIBLE PERSON EM114, (blank) lfenster@dtic.mil	
a. REPORT Unclassified	b. ABSTRACT Unclassified	c. THIS PAGE Unclassified		19b. TELEPHONE NUMBER International Area Code Area Code Telephone Number 703767-9007 DSN 427-9007	
				Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std Z39.18	

REPORT DOCUMENTATION PAGE

FORM APPROVED - - - OMB NO. 0704-0188

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1. AGENCY USE ONLY (LEAVE BLANK)		2. REPORT DATE		3. REPORT TYPE AND DATES COVERED STUDENT RESEARCH PAPER	
4. TITLE AND SUBTITLE THE BATTLE OF VUKOVAR – THE BATTLE THAT SAVED CROATIA		5. FUNDING NUMBERS N/A			
6. AUTHOR(S) Major Mario Šebetovsky					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) USMC COMMAND AND STAFF COLLEGE 2076 SOUTH STREET, MCCDC, QUANTICO, VA 22134-5068		8. PERFORMING ORGANIZATION REPORT NUMBER NONE			
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) SAME AS #7.		10. SPONSORING/MONITORING AGENCY REPORT NUMBER: NONE			
11. SUPPLEMENTARY NOTES NONE					
12A. DISTRIBUTION/AVAILABILITY STATEMENT NO RESTRICTIONS			12B. DISTRIBUTION CODE N/A		
<p>abstract (maximum 200 words)</p> <p>The key battle in the Croatian Homeland War that led to Croatia independence was the Battle of Vukovar. Despite its importance, very little has been written about this battle from a professional military perspective. Despite the fact that the Croats ultimately were forced to give up the city, which meant a tactical Croatian defeat, at a strategic level Vukovar represented a victory for Croatia. It was a decisive moment in the war in the sense that the battle forced Serbia and the Yugoslav People's Army (the JNA) to reduce their expectations to more realistic level. Although this study discusses why the Battle of Vukovar was so important at both the operational and strategic levels, much of the focus will be at the tactical level, because events at this level naturally had an impact on and are the key to understand the battle at higher levels.</p>					
14. SUBJECT TERMS (KEY WORDS ON WHICH TO PERFORM SEARCH) Vukovar, Homeland War, Croatia, the JNA, Serbia, Milošević			15. NUMBER OF PAGES: 54		
			16. PRICE CODE: N/A		
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE: UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT		

*This paper is dedicated to
my wife and my children
because their love and
understanding showed me the
path to a new life.*

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STAFF COLLEGE OR ANY OTHER GOVERNMENTAL AGENCY. REFERENCES
TO THIS STUDY SHOULD INCLUDE THE FOREGOING STATEMENT.

EXECUTIVE SUMMARY FORMAT

Title: The Battle of Vukovar: The Battle that Saved Croatia.

Author: Major Mario Šebetovsky, Croatian Armed Forces

Thesis: The key battle in the Croatian Homeland War that led to Croatia independence. It was a decisive moment in the war in the sense that the battle forced Serbia and the Yugoslav People's Army (the JNA) to reduce their expectations to more realistic levels.

Discussion: The key battle in the Croatian Homeland War that led to Croatia independence was the Battle of Vukovar, the little city on the Danube, on Croatia's eastern border, which extended from May 1991 until the defenders' general surrender on the 18th of November.

Vukovar was not only the bloodiest, but also the most decisive engagement in Croatia's Homeland War. Despite the fact that the Croats ultimately were forced to give up the city, which meant a tactical Croatian defeat, at a strategic level Vukovar represented a victory for Croatia. It was a decisive moment in the war in the sense that the battle forced Serbia and the Yugoslav People's Army (the JNA) to reduce their expectations to more realistic levels.

Conclusion: The Battle of Vukovar was important at both the operational and strategic levels of war. This paper was focused at the tactical level, because events at this level had an impact on both operational and strategic levels.

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Introduction

"I told them for hundred times:" Don't break your teeth on fortified cities."

General Radojica Nenezic,
Serbian Ministry of Defense
Office

The key battle in the Croatian Homeland War that led to Croatia independence was the Battle of Vukovar, the little city on the Danube, on Croatia's eastern border, which extended from May 1991 until the defenders' general surrender on the 18th of November. Despite its importance, very little has been written about this battle from a professional military perspective.

Although there cannot be a definitive study until all the relevant documents are made available, there is enough material in the public domain to permit at least a preliminary analysis addressing the key issues, and from which lessons learned may be drawn that are applicable beyond the specific event.

Vukovar was not only the bloodiest, but also the most decisive engagement in Croatia's Homeland War. Despite the fact that the Croats ultimately were forced to give up the city, which meant a tactical Croatian defeat, at a strategic level Vukovar represented a victory for Croatia.

It was a decisive moment in the war in the sense that the battle forced Serbia and the Yugoslav People's Army (the JNA) to reduce their expectations to a more realistic level. Although this study will discuss why the Battle of Vukovar was so important at both the operational and strategic levels, much of the focus will be at the tactical level, because events at this level naturally have an impact on and are key to understanding the battle at higher levels.

I personally fought in this battle, arriving on 15 September 1991, and took part in operations in Borovo Naselje. I was directly engaged in many of the events described in this paper, and I will draw from my personal observations and experience as appropriate. During my engagement in the Homeland War, I was wounded three times, including once nearly fatally in Vukovar but I recovered in time and was able to take part in the fighting until my unit managed to break out just two days before the fall of the city.

The Strategic Context of the Battle of Vukovar

The Battle of Vukovar must be viewed in terms of the broader campaign for a "Greater Serbia", based on a detailed program called the *Serbian Memorandum*. Serbian intellectuals of the Academy of Arts and Sciences developed this program in 1986, which reflected nationalist ideals originating in the 19th century. The *Memorandum* stated that all Serbs had been "humiliated" by the Communists after World War II because they were not given their own state as everyone else. This nationalist argument followed: Serbia is wherever there are Serbs, irrespective of state borders, non-Serb majorities or historical and democratic rights.¹

Slobodan Milošević, a rising star in the Serbian political system in the 1980's, adopted the goals of a Greater Serbia from the *Memorandum* as a way to retain power even as Communist regimes were falling elsewhere. In order to gain Serbian support, he aroused and promoted Serb nationalist demands including those of the Serbs in Croatia. As the Croatians saw it, his goal was to swallow up Serb-inhabited territory in Croatia and more. As

¹ See Branka Magaš, *The Destruction of Yugoslavia: Tracking the Break-up 1980-92* (London: Verso 1993), xiii; Stjepan Mesic, *The Road to War*, in Branka Magaš and Ivo Žanic, *The War in Croatia and Bosnia-Herzegovina 1991-1995*, (Portland, OR: Frank Cass Publishers 2001), 7.

Yugoslavia moved toward disintegration, and Croatia toward independence, extremist Serb elements in Croatia, openly aided by Serbia, began arming themselves by the summer of 1990.

At the same time, the JNA, already dominated by the Serbs, was transformed into an Army working in close cooperation with Milošević and the Serb nationalists. Given Serb territorial aspirations, Croatian resistance and war was inevitable.

When war broke out in 1991, the impression among JNA personnel was that Croatia would succumb quickly. The JNA certainly looked strong on paper, especially in terms of numbers of personnel and weapons, in part because it had seized almost the entire arsenal belonging to Croatia's Territorial Defense Forces and transferred it to JNA control.²

Moreover, the JNA benefited from the lack of preparedness and political missteps by Croatia's new government. For example the Croatian political leadership, embodied by President Franjo Tudman, assumed that the crisis would be resolved peacefully with major help by the international community. Tudman believed that if Croatia

² The Territorial Defense Forces were the republic-based reserve organization set up in 1969 in the wake of the Soviet invasion of Czechoslovakia.

could garner assistance from the international community then there would be no war.³ However, by the time the Croatian leadership recognized its mistake, the JNA and paramilitary Serb units had already taken advantage of the situation and occupied extensive areas of Croatia. Moreover, those erroneous initial estimates forced local crisis staffs, which had been formed spontaneously, to depend on themselves if they were to organize a defense and to arm the defenders.

On the contrary, Croatia's military leadership, led by the then-Minister of Defense, General Martin Špegelj, had a more realistic view of the likelihood of war, and proposed mass mobilization for general defense and the creation of small, well equipped, mobile units for offensive actions against the JNA.⁴ Those units were ultimately to play a key role in the initial Croatian strategy - the siege and reduction of JNA garrisons and barracks. With the surrender of some of these garrisons, the Croats gained desperately needed equipment such as small arms, artillery, and even

³ President Tudman even said in one interview that "he would not hesitate to call in Western troops to defend Croatia if the republic was attacked." Despite that, he believed the Yugoslav Minister of Defense, General Veljko Kadijevic, who had promised that the JNA would not attack Croatia. Reported by Vjekoslav Krsnik, "Hrvatska i dalje racuna na podršku svijeta" [Croatia Still Continues to Rely on the World's Support] *Nedjeljni Vjesnik* (Zagreb) 3 February 1991, 1.

⁴ However, General Špegelj notes that his recommendations for mobilization were ignored until quite late. As a result of, the Croatian leadership lost valuable time preparing defense forces, which led to greater losses in terms of lives, territory, and infrastructure, General Martin Špegelj, *Sjecanja vojnika* [Soldier's Memoirs], (Zagreb, Znanje d.d. 2001), 157.

armor.⁵ This represented a big step forward in arming the Croatian defenders because the military leadership was now able to establish new combat units and to provide them with weapons.

The Operational Setting

⁵ At the very beginning of the Homeland War, the majority of the Croatian defenders had no weapons at all. Most Croat weapons were hunting rifles, pistols, or antiques from WW II, or even WW I. The only well-armed units at that time (but armed only with light weapons) were the Special Police Forces.

Vukovar's Geographic and Political Context

Vukovar is a mid-sized town, nestled in Eastern Slavonija on Croatia's eastern border with the Serbian region of Vojvodina. Vukovar and Vojvodina are divided by a natural boundary, the Danube River. From the JNA's perspective, it was important to take the town in its rear as JNA forces moved deeper into Croatia. The capture of Vukovar was part of Belgrade's plan to seize other cities in the region, such as Vinkovci and Osijek, and to penetrate even further in order to link up with Serb forces deployed in Western Slavonija.⁶

The JNA leadership was apparently reluctant to leave Vukovar as a threat to what it envisioned as its rear, although it is not clear why the decision was taken to actually seize Vukovar rather than to just bypass it. Nevertheless the JNA's expectation that taking the city would be easy may have induced it to try to do so.

As tensions escalated, the Vukovar area was subjected to intensive propaganda from Belgrade and saw the organized arming of the local Serbian population by the JNA and by Republic of Serbia forces and agencies subordinated to

Serbia's. Large numbers of volunteers openly supported by Serbia deployed to villages in Croatia that had a Serb majority population.⁷

Borovo Selo, in the immediate vicinity of Vukovar, became a Serbian stronghold. It was here that first two, and later another twelve Croatian policemen were ambushed and killed, and many more wounded in May 1991. This event is considered to be the actual beginning of the shooting war.

The JNA's area of operations was the entire area of Vukovar and the immediate objective of this campaign was to occupy by armed force all the undefended villages, as well as to massacre or drive away the non-Serb population. The seizure of territory coupled with "ethnic cleansing" was designed to satisfy the broader strategic goal of detaching a large portion of Croatia up to the Virovitica-Zagreb-Karlovac-Ogulin-Knin-Zadar-Split line, with the city of Karlovac intended as its capital.⁸ Ultimately, the intent

⁶ General of the Army Veljko Kadijevic, the then chief of Yugoslav General Staff and Minister of Defense, *Moje videnje raspada* [My View of the Collapse] (Belgrade: Politika, 1993) 135, 137, 138.

⁷ Those paramilitary forces were known by different names: Chetniks, White Eagles, Arkan's Serbian Volunteer Guard, and many others. On the links between the Serb paramilitaries and Milošević's Government, see Paul Williams and Norman Cigar *A Prima Facie Case for the Indictment of Slobodan Milošević*, (London: Alliance to Defend Bosnia-Herzegovina, 1996), 4.

⁸ In his book *Moje videnje raspada* [My View of the Collapse] (Belgrade: Politika, 1993), 134 - 140, 142, General Veljko Kadijevic, the JNA Chief of Staff and Yugoslavian Minister of Defense explicitly wrote about the JNA mission in Croatia which was: to prepare JNA for the war against Croatia, "to protect" the Serbian population in Croatia, as well as to arm them. Preventing "intra-national conflicts" was the excuse the incomplete Yugoslavian Presidentship (Slovenian and Croatian member refused to take the contribution in this act) used to start the war against Croatia.

was to join all Serb-controlled territories to Serbia, creating a "Greater Serbia." Conversely, Zagreb desperately needed to keep all the defenders and civilian inhabitants in place in all the endangered Eastern Slavonian cities, and in Vukovar in particular, given its geographic location. In military terms, Vukovar had to be held in order to stop the still fresh JNA units and Serb paramilitary elements as the latter were moving toward from taking even more strategically important areas such as the city of Vinkovci. At the very least, Vukovar's defenders would have to delay the invading force until the Croatian Army could grow stronger, because at that time the enemy might otherwise have been able to cut off the city of Osijek and, perhaps, even to occupy the entire Eastern Slavonian area.

The Military Balance

In terms of force structure in the Vukovar area, the JNA massed about 35,000 - 40,000 men, and the overall commander was Lieutenant General Života Panic. He divided the entire Area of Operations (AO) into two Areas of Responsibility (AOR) - Northern and Southern AOR.⁹ The head

⁹ Karlo Jeger and Maroje Mihovilovic, "Gardista razapetog na vagon gadjali su tenkovskim topom" [They Shot with a Tank Gun at a Guard Member Spread-Eagled on a Wagon], *Globus* (Zagreb) 6 November 1992, 13.

of the Northern AOR was Major General Mladen Bratic who was killed during the Battle of Vukovar. The Northern force consisted of one Armor Brigade, one mobilized Armor Regiment from the city of Pancevo and, as reinforcement, in Borovo Naselje the 211th tank battalion from Baranja.¹⁰ The Southern force was under the command of Colonel Mile Mrkšić and consisted of the 1st Guards Armored Brigade, and three mobilized brigades from the cities of Šabac, Kragujevac, and Valjevo.¹¹ To increase the efficiency of units, part of the elite Airborne Brigade from the city of Niš was cross-attached in the area from early October. A Military Police Battalion from Belgrade was also engaged in the area to prevent order, robbery, and to imprison deserters.

To these regular JNA forces were cross-attached many other smaller regular units, Serbia's police, militia forces, and paramilitary troops operating as attached to the regular units or independently. As a ground fire support there were three separate heavy artillery and Multiple Rocket Launcher (MLR) regiments, together with artillery units from the brigades.

As air support General Panic had one Fighter Squadron, the 252 mixed Fighter-Bomber Squadron, and one mixed

¹⁰ Ibid.

¹¹ Ibid.

Transport Group located at the airport of Batajnica in Serbia. At the airport of Tuzla, there were the 172nd mixed Fighter-Bomber Squadron and the 353 Recon Unit from the city of Mostar.¹²

On the Croatian side, forces in Vukovar consisted initially of 4th Battalion/3rd Guards Brigade, together with elements of the 1st Guards Brigade, for a total of 400 Guardsmen as well as some 300 police officers from Vukovar, Slavonski Brod, and Varaždin. Other Guards units arrived in the city after the gradual loss of the area of Western Srijem. In addition, there were some 1,100 inhabitants from Vukovar and the surrounding communities who volunteered to defend their city. These forces were only partially armed and had very little heavy equipment. In general, the defenders had only infantry weapons such as semi-automatic and automatic rifles, and only a few machine guns and artillery pieces. However, the defenders had several hundred anti-tank weapons, such as the 64mm M80 Antitank Rocket Launcher 'Zolja' (equivalent to the LAAW, or AT4), and few dozen 90mm M79 Antitank Rocket Launcher 'Osa' (equivalent to the American SRED or Dragon).¹³ The

¹² Karlo Jeger and Maroje Mihovilovic, "Gardista razapetog na vagon gadjali su tenkovskim topom" [They Shot with a Tank Gun at a Guard Member Spread-Eagled on a Wagon], *Globus* (Zagreb) 6 November 1992, 13.

¹³ "Zolja" means Horsefly, and "Osa" means Wasp in Croatian.

defenders' arsenal also included some 120 mm heavy mortars, three 105 mm howitzers, some light howitzers and 76 mm cannons (ZIS-3 and B-1). However, there was so little ammunition available that literally every shot had to count. Weapons, food, and medical supplies were brought into the city only sporadically by way of a narrow corridor - the "Cornfield Road" - through the cornfields near the villages of Marinci and Bogdanovci. However, this resupply route was only open until October, after which the Vukovar area was completely surrounded by Serb forces.

There are several explanations as to why Vukovar never received the support it needed in terms of manpower, weapons, and ammunition. Although Zagreb did dispatch convoys and men, nothing of significance arrived in Vukovar. There are some of the potential reasons why Vukovar never received any significant help: the presence of densely seeded minefields everywhere in the area, Serb ambushes in the expectation that Croatian units armed with heavy weapons would mount larger counterattacks in this area. The other one could be the fact that a good part of these convoys with weapons, ammunition, and other supplies were being redirected to Herzegovina and the Bosanska Posavina as support to the Bosnian Croats.

The imbalance in military power was such that, according to military theory, Serbia should have overrun Vukovar within a few days, and according to JNA's intelligence, their assessment was that Vukovar could not resist longer than two weeks.¹⁴ Instead, the besieged town resisted the overwhelming military force for almost three months because they underestimated Croatian defenders' morale and will.

¹⁴ Considering that the first serious attack by the Serbs started on 07 August 1991, the Vukovar defenders held out for a total of 103 days without the rest. If we consider the heavy bombardment on 24 August as the beginning of the battle, than the Croats put up a stout organized resistance for 83 days – until 17 November 1991.

Chapter three - Fighting the Battle

While fighting in Vukovar had already begun on 2 May 1991, the real battle for Vukovar started in the second part of July 1991. Given the lopsided imbalance in combat power, it is not surprising that the JNA was initially able to seize so much territory in the Vukovar area. The region of Baranja, for example, had fallen to the JNA by August 1991, and almost the entire district of Vukovar was also occupied.

JNA reservists from the Novi Sad Corps (Vojvodina) crossed into Croatia over the bridge at Batina and Erdut, while units of the Tuzla Corps from Banja Luka, Bosnia-Herzegovina, crossed the bridge over the Sava River at Županja. At the same time, the main JNA force was arriving from the Belgrade Area Command and Serbian Territorial Defense units were deploying from the direction of Šid-Tovarnik-Ilaca-Oriolik-Negoslavci. JNA forces regrouped in the villages surrounding the city of Vukovar, such as Negoslavci, Trpinja, Bobota, and Borovo Selo, and along the Danube River.¹⁵

It is necessary to emphasize how the JNA at the beginning of the war used the "Areas of Separation",

¹⁵ See the Figure 1.

ostensibly established as neutral zones to part Croatian government forces from local Serb rebels, to occupy particular areas and positions. The principle was always the same. Someone in a Serb village would open fire, and the Croatian security forces would respond. After that the JNA, with the excuse of creating another area of separation, would occupy a new position which served to Serb villages as a shield, and as yet another starting point for the JNA to move its forces forward, as well as a new source for JNA personnel and supplies. When the JNA was ready to move forward again, they would use heavy artillery and tank fires to create chaos and to cause more casualties, forcing the local inhabitants into exile.

Phase I of the JNA's initial plan was to seize Vukovar in a single day. According to the JNA General Staff assessment, Vukovar was in a very weak defensive position. According to JNA expectations, the city had no significant military and police forces able to stop the impressive JNA power associated with the mobilized and paramilitary forces.¹⁶

The general attack on Vukovar started on 24 August with several air strikes and a heavy artillery

¹⁶ The then-Minister of Yugoslav Internal Affairs, General Petar Gracanin, admitted at the time that "the JNA in Vukovar has more personnel and equipment than during WW II when breaking the German defense

bombardment.¹⁷ Further air raids followed, along with infantry attacks. The first buildings to be hit in Vukovar included the hospital, the Workers' Club, the Catholic Church, and the water tower. At that time, there were already 300 wounded, most of whom were being treated in the Vukovar hospital. Despite the intensity of the initial attack, the Croatian defenders put up an extremely strong resistance, even shooting down two JNA aircraft and destroying ten tanks. Attacks continued on the 27th and 28th with the same disastrous results for the JNA and proved to be a bitter surprise to the attacking forces.

After the unexpected 24 August fiasco in which the JNA had suffered its first serious defeat, the JNA leadership realized that it would not be as easy to conquer Vukovar as they had imagined originally. They were therefore forced to reconsider their plan and to modify Phase II of Operation Vukovar. The new plan was very simple, and relied for success on the JNA's overmatch in the quantity of personnel and equipment.

Phase II was to last for about a week, making it necessary for the JNA to gather and regroup its personnel and equipment. In the meantime, the JNA carried out an

in this area," Mile Dedakovic-Jastrebo, Alenka Mirkovic-Nad, Davor Runtic, *Bitka za Vukovar* [The Battle for Vukovar], (Vinkovci: Vinkovacke jeseni d.o.o FWT, 1997), 42.

¹⁷ Some sources indicate the date as 25/26 August 1991.

"attack at a distance," (the military euphemism for uncontrolled bombardment of the Vukovar area with all the available weapons) in which the JNA fired thousands of rockets, bombs, and shells of all calibers against the city.¹⁸ The intent of the barrage apparently was to frighten the Croatian defenders in Vukovar so as to paralyze the defense, after which JNA would engage all its forces to overrun the town.

To support Phase II, in the period from August until November 1991, the JNA engaged ten mechanized and armor brigades in the Vukovar area, with more than 600 tanks and other armored vehicles.¹⁹ According to later Serb assessments, the JNA had an abundance of all types of artillery and plenty of ammunition, and there was no air defense to stop JNA aircraft.²⁰ In addition, the JNA could count on thousands of mobilized reservists and well-armed paramilitary volunteers.²¹

Despite all these advantages, JNA leaders made several, serious mistakes in attacking Vukovar. Perhaps the

¹⁸ Mortars, Multiple Rocket Launchers, howitzers, cannons, tanks, and aircraft were engaged in shelling the town. For example, while engaged in the three-month attack on Vukovar, the elite JNA Guards Brigade from Belgrade fired off the ammunition projected for a four-year period, Dedakovic-Jastrebo, *Bitka za Vukovar*, 61.

¹⁹ See Figures 2 and 3.

²⁰ The defenders in Vukovar demonstrated exceptional bravery and inventiveness in using unusual weapons, such as AK 47s, to shoot down enemy aircraft. The final number of the JNA aircraft shot down was about 29.

²¹ [Maj.] Veljko B. Kadijevic, "Izmedju umeca i sile", [Between Skill and Force], *Vojska* (Belgrade), 4 May 1995, 12.

key mistake was that rather than surrounding Vukovar and not carrying out operations anywhere else until Vukovar had surrendered, the JNA could have just left Vukovar surrounded with a blocking force while moving forward elsewhere with the rest of their uncommitted units to the Vinkovci-Osijek perimeter, thus saving time, personnel, and equipment. Instead, the JNA chose to clear the entire area along the Danube River and to eliminate all resistance as they penetrated this area before advancing further.

As far as the JNA's operational shaping in the initial phase of the battle, the basic approach was, first, to implement a complete blockade of Vukovar so as to isolate it from any outside support. Then, supported by saturation artillery barrages and air strikes, the JNA sought to penetrate into the city by using small combined armor-infantry units.

The JNA's intent was, first, to reach its garrison in Vukovar, which had been surrounded in its barracks, in the Southeast part of the city. From there, the attacking force could then develop the attack from inside the city, which would facilitate the overall operation by facing the defenders with an additional dilemma while reducing potential JNA manpower and equipment losses.

The usual JNA tactical operation during this first phase consisted of massing tank platoons (some 20 tanks and 30-40 APC's), followed by a few infantry companies. When these forces mounted an attack, however, they found themselves forced to operate in very restricted urban terrain, which led to disaster because they were not able to disperse their forces and bring their full combat power to bear.

As noted, Vukovar's defenders suffered from a serious lack of arms, ammunition, and manpower. Additionally the city also desperately needed professional help in the organization of its defense; after all the Croatian defenders, though full of fighting spirit had become soldiers only few months previously. On 31 August, two professional soldiers assigned by the Croatian General Staff, Lieutenant Colonel Mile Dedakovic, code name Jastreb (the Hawk), as commander, and Captain Branko Borkovic, code name Mali Jastreb (the Little Hawk), as his deputy, arrived in Vukovar and began to organize a 360⁰ perimeter defense, by dividing the city into sectors which consisted of the local communities, including the suburbs such as Borovo Naselje.²² Even as the local defenders were engaged in

²² Both were former JNA officers who had been educated at the JNA Military Academy. The fact that both of them were professional soldiers meant a lot to the Croatian defenders. "Everything became more organized with their arrival, and we started doing our job according to the military rules" according to

repelling JNA attempts to break through with tanks and infantry, they were organizing themselves into a brigade during the fighting. That meant that, in addition to the two Guard Brigades mentioned earlier, the local defenders now organized themselves into the 204th Brigade, which came to be known as the Vukovar Veterans' Brigade.

Furthermore, the commander started developing an "active defense." The concept of active defense speaks for itself: if possible, the defenders should not wait to be attacked; rather, using their limited manpower and equipment extremely rationally, the defenders would undertake limited offensive operations to keep the enemy off balance.²³ This also required the use of intelligence and imagination in employing various weapons in innovative ways and the setting of traps as an asymmetric means of resisting a stronger enemy. For example, special ten-man strike teams were set up, whose mission was to surprise and to stop the enemy. These teams were ready to react anytime and anywhere, to destroy tanks even before their engagement in the battle and by intercepting enemy columns while the latter were still moving to contact. In terms of

Matija Mandic, the 3rd company commander, engaged in the Mitnica sector, *Dedakovic-Jastrebo, Bitka za Vukovar*, 40.

²³ According to Dedakovic-Jastrebo: "I did not want to let my men lie in trenches, or staying behind the corner and waiting. We had to strike wherever and whenever possible - while regrouping, reinforcing, replacing, while supplying..." *Bitka za Vukovar*, 50.

innovation, the Croatian defenders even used weather rockets as a weapon. While these rockets had too little explosive to inflict any serious damage, they were noisy and garnered a large psychological effect, because the Serbs believed that the Croatian defenders possessed more sophisticated weapons like surface-to-surface missiles.²⁴

The reason why this system of defense worked well was simple: the situation in the area of operations provided little alternative, and the unequal force ratio compelled us to apply our advantages, such as they were, against the JNA's vulnerabilities. Initiative, willingness to fight, individual situational awareness, and the defenders' chain of command based on mutual trust between subordinates and superiors were principles that proved to be force multipliers for the Croatian defenders of Vukovar on a day-to-day basis. The Croatian defenders organized resistance in coordination with the committed and talented commanders in different sectors, like the legendary Blago Zadro, who was to become commander of one of the most important

²⁴ There was another interesting invention - the defenders innovated a very simple mechanism that, screwed on a gun barrel, was able to project hand grenades 200 – 300 meters away. Serbs appeared to be confused and frightened because they assumed the defenders were closer than they really were.

sectors during the Battle of Vukovar - the nearby town of Borovo Naselje.²⁵

To a large extent, it was thanks to this improved organization and coordination that the defenders subsequently were able to repulse the JNA's main attacks which relied on the latter's armored-mechanized groups. The commander rallied the defenders and solved the problem of empty spaces not covered by fire by digging trenches to provide protection to the defenders, and to hamper the enemy's mobility. Moreover, those trenches also served us as logistics lines of communication throughout the city.

Furthermore, the doors and windows in buildings were turned into firing positions protected by sandbags. We used holes made by enemy bombs or shells in the walls for rapid maneuver or escape. To prevent catastrophic fires, all flammable materials were removed from rooms and floors were covered by sand. The sand cellars were designated as shelters or underground lines of communication.

The various sectors were well connected with each other and it was easy to maneuver with the limited number of available anti-armor weapons in order to destroy enemy forces along the avenues of approach. While frontal hand-

²⁵ He was shot to death on 16 October, but by then had already become a true legend because of his bravery and the skills he developed during the battle of Vukovar. He was a natural-born leader, as were many others who rose to prominence during the Homeland War.

to-hand fighting was at times unavoidable, the most efficient means of engaging the enemy was to maneuver using masked shelters and underground lines of communication. The use of both anti-personnel and anti-tank mines was very effective and all unused buildings, positions, and lines of communication in the area were mined.

Serb soldiers were unprepared for small-unit firefights against the Croatian defenders, because of the deficiencies in command and control in units at the platoon and squad level. Small-unit leadership was what was needed to fight against Croatian combat teams ensconced on the ground and upper floors of buildings and in basements or underground passages, but the Serb officers' understanding of military operations in urban terrain appeared superficial at best.²⁶ Their knowledge of military operations in urban terrain appeared to be only theoretical, learned from manuals, and not reinforced by practical training. The same situation was even more true of the JNA enlisted personnel. They appeared to have no clue how to deal with the booby traps and elastic defense that we had to develop. JNA decision-making also was slow and reactive. When attacking, the JNA advanced

²⁶ [Maj.] Veljko B. Kadijevic, "Izmedju umeca i sile", [Between Skill and Force], *Vojska* (Belgrade), 4 May 1995, 12.

predominantly frontally, without separating and isolating particular segments in the town. The JNA kept using assault teams until these suffered too many casualties and, overall, the JNA wound up fighting according to the Croatian defenders' "game plan", quite opposite from the initiative needed according to urban warfare principles.²⁷ The JNA often seemed to realize what was going on after it was too late to react. As a result, the impact of tactical surprise on JNA personnel was often far out of proportion to the material damage inflicted. This shock effect had negative repercussions all the way up the chain of command. Subordinates became reluctant to fight against such an enemy, despite their officers' urgings.²⁸

Here will be described typical engagements to illustrate JNA and Croatian tactics. In the very beginning, the JNA used cornfields and other agricultural areas surrounding Vukovar as avenues of approach, but that year the corn was unusually high (almost 10 feet), so that tank crews lost their bearings very easily, while the defenders took advantage of these fields by seeding them densely with mines. As a result, the attacking forces decided instead to use roads and streets as key avenues of approach, thus

²⁷ [Maj.] Kadijevic, Veljko B., "Izmedju umeca i sile", [Between Skill and Force], *Vojska* (Belgrade), 4 May 1995, 12.

giving an opportunity to the defenders to restrict the close battle area to their advantage. The Serbs would advance along a street in tanks and APC's, with five, six, and often even more vehicles all in a column, followed by their dismounted infantry. To counter this, a small number of defenders positioned in the street would open fire on the tanks from a distance of a few yards from one side of the street. However, they were only acting as a decoy in order to give other defenders, armed with anti-armor weapons, the opportunity to take a position on the other side of the street so that they could hit the lead and rear tanks in the column.²⁹ Thus rendered unable to maneuver, the enemy column was trapped in the narrow city street.³⁰

Because of the severe shortage of anti-armor weapons and the pressing need to preserve ammunition, every one of our shots had to be accurate. Sneaking up on a tank to a distance of less than sixty feet (the average distance at which tanks were usually engaged was one hundred fifty

²⁸ "Liniju Osijek-Vinkovci sada drže samo aktivne jedinice" [Only Active-duty Units are Now Holding the Osijek-Vinkovci Line], *Narodna armija*, (Belgrade), 9 November 1991, 30.

²⁹ I was a member of these teams acting as a decoy. Because of the small number of defenders, everyone was forced to do everything. Even those individuals with some valuable skills, like anti-tank weapons specialists, were not assigned to handle only those weapons, but instead did whatever was required at the time.

³⁰ It was Blago Zadro who coined the rule "Hit the infantry, don't touch armor until it comes deeper." This was one of the golden rules the Croatian defenders accepted, knowing well that any tank or APC has no chance in an urban area if not supported by a sufficient number of infantry.

feet) in order to ensure greater accuracy before firing became the usual method of employing anti-armor weapons.³¹

Once the column of vehicles was thus trapped, the defenders could then destroy all the vehicles and crews in detail. Such tactics were best for older model tanks, but for the more modern and robust vehicles like the T-84, other tactics had to be applied. Against such newer tanks, we used, for example, three-man "hunter-killer" teams consisting of a sharpshooter whose task was to destroy the tank's periscope, while a second man, armed with an "Osa" or RPG, attempted to hit the tank, with the third member of the team set to finish off the crew with automatic rifle fire when they abandoned the vehicle. The JNA infantry, thus deprived of its armor support, was then surrounded and destroyed by the defenders, who fired from protected and often undetectable positions in cellars, canals, and trenches.

There was another aspect of these engagements that confused the JNA attackers: the Croatian defenders never

³¹ This procedure was not reasonable for all anti-armor weapons, of course. The "Zolja," for instance, requires a distance of at least 450 feet to get the necessary acceleration to be activated. This weapon was most useful against T-34 and T-55 tanks, because they are more vulnerable than the T-84, which is much better armored and technically more survivable (low profile, vital parts better protected, thermal sight, etc). The T-34's and T-55's most vulnerable points were the connection between the turret and hull, the tracks, and the transmission positioned in the back of the tank; interview with Col. Milorad Vucic, commander of a JNA mechanized infantry brigade, conducted by Lt. -Col. Gen. (Ret) Dušan Dozet, Lt. Col. Nikola Ostojic, and Pero Damjanov, "Ti divni ljudi, mladi ratnici (2)" ["Those Wonderful People, Young Soldiers"], *Narodna armija*, (Belgrade) 25 December 1991, 13.

sought to destroy tanks or armored vehicles completely. The reason for that was purely rational and economic, because if a vehicle suffered catastrophic damage we could not retrieve arms and ammunition from the vehicle, an important source of resupply for the Croatian defenders. The Croatian defenders put so many JNA armored vehicles out of commission that, for instance, Trpinja Road in Borovo Naselje became well known as the "Tank Cemetery" because it was literally covered with destroyed tanks, APC's, and other armored vehicles.

Later, when the JNA recognized that such tactics were resulting in enormous casualties without achieving results, tactics were revised. Teams of four JNA tanks approached first, zigzagging and destroying each and every house all along the street. These were followed by four APC's whose task was to support the tanks with heavy machine gun fire. The infantry, in the meantime, moved forward by using the gardens, back yards, and trenches for cover.

The JNA also introduced other tactics, such as firing at the walls of houses, and then driving tanks straight through the homes, while using smoke bombs to mask the area and tear gas to disable the defenders, allowing them to occupy a defended building. Direct fire support was very important for the JNA in this phase, and included the M42,

76 mm anti-tank cannon, to break down walls, the air-defense three barrel machine-gun mounted on APC's to target machine-gun nests and to support the JNA infantry, and light 60 and 82 mm mortars, which were very efficient because of their accuracy.³² The JNA infantry used this firepower advantage to capture terrain house-by-house, building-by-building, and nibbling away at space in this way, forcing the defenders to withdraw, and causing heavy casualties.

The Croatian defenders' priority remained to destroy as much enemy armor as possible. One very efficient tactic proved to be to sneak up at the night to the enemy's tanks and to plant mines underneath them. By any standard, these were acts of considerable bravery. In the morning, when the enemy wanted to move to new positions, the tanks would blow up for no apparent reason.

Knowing this, JNA tank crews, fearing for their lives, often abandoned their tanks in a bid to escape. Their superior officers could turn them back only with the threat of shooting.³³ Of course, war correspondents reported those incidents as soon as possible, and the impact of those

³² Milorad Pantelic, "Dragocen doprinos ratnoj veštini" [A Precious Contribution to the Art of War] *Narodna armija*, (Belgrade) 30 December 1991, 19.

³³ Mile Dedakovic-Jastrebo, Alenka Mirkovic-Nad, Davor Runtic "Bitka za Vukovar" [The Battle for Vukovar], (Vinkovci: Vinkovacke jeseni d.o.o FWT, 1997), 54.

reports on the attackers' morale must also have been damaging.

While the defenders of Vukovar won the battle against the JNA's armor, they could not prevent the destruction of the city by artillery and rockets, and could not hold out indefinitely against the attacks of a numerically vastly superior JNA. In particular the JNA's long-range artillery played a critical role in the Battle of Vukovar. The JNA had an abundance of artillery weapons, so that it was not at all difficult to establish artillery coordination. In addition, the JNA had well developed artillery reconnaissance that provided the artillery accurate targeting information.³⁴ By early November, it became clear that the resistance had weakened because of the lack of weapons, ammunition, and, especially because of the personnel losses among the defenders.³⁵ The town prepared to surrender.³⁶ Some of the fighters broke away for freedom because they did not want to surrender, but many others chose to stay in the town because they had families there.

³⁴ Milorad Pantelic, "Dragocen doprinos ratnoj veštini" [A Precious Contribution to the Art of War] *Narodna armija*, 30 Dec. 1991, 19.

³⁵ See Figure 4.

³⁶ While negotiating about surrender, the defenders made the last attempts to save civilians. They negotiated with one JNA colonel, and tried to bluff him talking that they are still powerful enough to make break away, but he softly replied: "Gentlemen, you are still strong enough to make a possible break away, but don't forget, you have 12 000 civilian behind. If you do any wrong decision, be sure you will never see nor children, nor women, nor obsolete..." Quoted in Mile Dedakovic-Jastrebo, *Bitka za Vukovar*, o cit., 238.

On the Serb side, some 300 armored vehicles, among them 50 tanks (T-84, T-55, T-34), were destroyed and about 29 aircraft were shot down, while the number of JNA and paramilitary forces, killed in action is estimated at 5000 – 7000 by Serb sources, or 14,500 by Croatian sources, with another 20,000 – 30,000 men wounded.³⁷ The defenders' resistance was so stubborn that it drew even the enemy's grudging respect. As one Serbian veteran acknowledged: "They fight like lions. Their bravery cannot be denied."³⁸ Even Željko Ražnatovic "Arkan", later an indicted war criminal and then commander of the most violent and the best trained and equipped paramilitary formation, the Serbian Volunteer Guard, angrily berated a group of Serbs who were teasing Croatian captives after the surrender: "Look carefully, you fools. A handful of those people killed 15,000 of you. If I could have these people I would be sitting in Ljubljana already."³⁹

³⁷ Norman Cigar, Croatia's War for Independence: The Parameters of War Termination, *The Journal of Slavic Military Studies*, No.2 (June 1997), 35; and Cigar, "The Serbo-Croatian War, 1991: Political and Military Dimensions", *The Journal of Strategic Studies*, 326; JNA sources confirmed the death of JNA Gen. Mladen Bratic in the fighting for Vukovar, "Kako je poginuo general Bratic" [How Gen. Bratic Died], *Narodna armija* (Belgrade), 9 Nov. 1991, 8; and Dedakovic-Jastrebn, *Bitka za Vukovar*, 176; and "About 117 JNA officers were Killed In Action in Vukovar, 3483 NCOs, etc. Some 4400 JNA members were seriously wounded, and some 3400 paramilitary forces members were killed, wounded, or Missing In Action. Some Serb sources claim only 1500 dead for the whole war." Fran Višnar, 1800 heroes that saved the Croatia, *Nedjeljna Dalmacija*, (Split) 17 November 1993.

³⁸ Norman Cigar, "The Serbo-Croatian War, 1991: Political and Military Dimensions", *The Journal of Strategic Studies*, No 3, September 1993, 319.

³⁹ Quoted in Mile Dedakovic-Jastrebn, *Bitka za Vukovar*, o cit., 238. The statement came from the Croatian defender Ivica Lukic-Zolja who had been captured in Vukovar.

Of the 1800 defenders who took part in the defense of Vukovar, 60 per cent were from the Vukovar area. In the end a third of the defenders successfully broke out from Vukovar in small groups when the city fell. About 500-600 had been killed during the battle, and the rest were captured and sent to Serb concentration camps, many of them wounded and unable to obtain appropriate medical treatment, all subjected to various forms of harassment and mistreatment. Sadly, many of the prisoners were executed.⁴⁰ In 1996, a mass grave with more than 270 bodies was identified at the Ovcara farm; one of the largest of 131 mass graves found in Croatia since 1991.⁴¹

What is perhaps most remarkable is that the defenders remained combat effective for so long despite having to live and fight in an inferno without respite, while being subjected to thousands of incoming projectiles devastating the town every day. There was a shortage of food and medical supplies, and the dead could not be buried because of the constant barrage of shells.

40 Karlo Jeger and Maroje Mihovilovic, "Gardista razapetog na vagon gadjali su tenkovskim topom" [They Shot with a Tank Gun at a Guard Member Spread-Eagled on a Wagon], Globus (Zagreb) 6 November 1992, 13-15.

41 "Of the 300 men taken from Vukovar Hospital on the morning of 20 November 1991, 261 remain missing. All of these men were alive after the end of hostilities in Vukovar, and all of these men were taken under JNA guard first to the JNA barracks and then to the Ovcara farm. They have not been seen alive since that time." From the Indictment of the Prosecutor of the ICTY in Hague against Mile Mrkšić,

Analyzing the Battle

This chapter will address the Croatian and Serb Operational and Strategic Centers of Gravity, the Croatian and Serb culminating points, and the critical vulnerabilities that were applied to Croatia and Serbia during the Battle of Vukovar on both the tactical and operational levels. They were reflected at the strategic level, and served as key indicators of further operations which were to affect the outcome of the Homeland War.

Strategic and Operational Centers of Gravity

For the Serbian war effort, Slobodan Milošević and the government in Belgrade constituted the strategic center of gravity. Milošević and his government initiated the

Miroslav Radic, and Veselin Šljivancanin, the commanding JNA officers during the seizure of Vukovar, <http://www.un.org/icty/indictment/english/mrk-ii951107e.htm>

conflict on the territory of the republics of the former Yugoslavia, and started supporting paramilitary forces organized by the Serbs in Croatia and those which were deployed from Serbia. Serbia provided these forces with funding and personnel, and along with the JNA, with arms.⁴²

On the Croatian side, national will and morale stood out as both the strategic and operational centers of gravity. As a rule, the Croatian defenders never seemed to be beset by the morale problems that Serbia and the JNA were confronted. At the national level Croatian military and civilian defenders created the necessary critical mass of will, tenacity, and courage sufficient to resist the much better equipped vastly more numerous enemy. The Croatian defenders in Vukovar, specifically, tired and sleepless, with no chance to fulfill even their most basic hygienic needs, never suffered from a lack of morale. The situation they were engaged in required courage and inventiveness and, more than that, a certain degree of audacity.

The JNA General Staff as another strategic center of gravity for the Serb war effort managed all the military operations in Croatia, while the JNA itself was the

⁴² Serbia's Ministry of Defense was the main source of support for such activities. See the account by Dobrila Gajic-Glišić, chief of staff to General Tomislav Simovic, Serbia's Minister of Defense, The minutes are those, *NIN*, 24 April 1992, p 26-7.

operational center of gravity. In Vukovar's case, especially, the JNA's critical capabilities were the JNA's large-sized heavy units and its airpower. A key variable in how well the breakaway republics did militarily was the amount of heavy weaponry that they had been able to acquire. Croatia got nothing of the Territorial Defense arsenal, but did get some arms from those garrisons it succeeded in besieging, which allowed it to halt the JNA advance in the latter phase of the war.⁴³

Critical Vulnerabilities

The JNA'S combat performance during the attack on Croatia, including in the Battle of Vukovar, revealed critical vulnerabilities that called into question its reputation as a formidable fighting force and undercut, at the operational level, its attempts to implement Belgrade's national strategy.

Morale

"The spirit and other moral qualities of an army... the temper of the population of the theater of war, the moral effects of victory or defeat - all these vary greatly. They

⁴³ The fall of the Varaždin base, for example, netted the Croatian forces 74 T-55 tanks, 61 APC's, 256 trucks, and 25,000 hand grenades, as well as substantial quantities of light arms; Nenad Stevanovic,

can moreover influence our objective and situation in very different ways," wrote Carl von Clausewitz in his masterpiece *On War*.

Morale was perhaps the key problem for Serbia and the JNA, and this significantly limited efforts, whether in Serbia generally or within the JNA specifically. The forces that were engaged in the Vukovar sector consisted of the JNA's best professional component, as well as conscripts, mobilized reservists, and paramilitary forces.

Fear of death was the first and very reasonable cause of declining morale, but there were many other important factors at work, too. Reservists, quantitatively a very important part of the JNA's deployed forces, claimed that they were being cheated because they did not know where they were going, what they were fighting for, and openly said they did not want to cross the Drina River which marks the boundary between Serbia and other states of former Yugoslavia because they considered those areas as not being part of their homeland.⁴⁴

"Proces generalu Trifunovicu; Izdajnik ili pokojnik" [General Trifunovic's Trial; Traitor or Deceased?], *Vreme*, 13 April 1992, 25.

⁴⁴ "...They do not know why they are fighting for, their families did not received any welfare, they won't fight for the "Red Star", they don't want to go across the Drina River..." An interview with Colonel Milorad Vucic, commander of a JNA mechanized infantry brigade, conducted by Lieutenant General (Ret) Dušan Dozet, Lt. Col. Nikola Ostojic, and Pero Damjanov, "Ti divni ljudi, mladi ratnici (2)" ["Those Wonderful People, Young Soldiers"], *Narodna armija*, (Belgrade) 25 December 1991, 12.

For example, two units totaling 2,600 reservists from the Serbian town of Valjevo deserted *en masse* from the Vukovar front, complaining that they had not been supplied properly, that JNA artillery had fired on them by mistake, and that they had not been told clearly what their mission was. The Yugoslav military press rued the fact that "While volunteers go to the front, some others look for any means to go in the opposite direction."⁴⁵ Another factor, which affected the morale in the JNA, was that many Croatian Serbs had moved to Serbia from Croatia as a result of the war rather than staying and fighting.⁴⁶ Serbia's Minister of Defense, General Marko Negovanovic reported that he "cannot protect the Serbs of Croatia from genocide if they do not want to defend themselves...their place is not in Serbia but in Croatia."⁴⁷

Combined Arms and Command and Control

Despite the fact that the JNA was well equipped, it proved to be neither well trained nor an effective fighting force. In particular, the lack of a functioning combined

⁴⁵ Quoted from Cigar "The Serbo-Croatian War, 1991: Political and Military Dimensions", 1993: For example, an entire unit went back home when one of the reservists, the son of a prominent politician, received an exemption before deploying to the front.

⁴⁶ According to one Serbian soldier: "There are the volunteers from Serbia, but only fifteen natives. The rest ran away to Serbia and found a job for themselves and their spouses. They left their old parents here for us to take care of and feed." Ognjen Janevski "Vojska ovamo još nije došla" [The Army Still Has Not Come Here], *Ilustrovana politika*, (Belgrade) 9 October 1991, 4.

arms capability was a serious vulnerability that was not corrected even in the battles after Vukovar. Part of the problem in this regard was the JNA's priorities on force protection to minimize casualties in order to avoid discontent, which led to reluctance to expose its infantry.⁴⁸ The JNA leadership was desperate to maintain morale, especially in the reserve component, but this problem appeared to be too big and too deep to be solved in the short run.⁴⁹ In addition, the departure from the JNA of the non-Serb military component resulted in a serious deficit of trained personnel in key specialties.

Most of the JNA officers agreed that self-initiative and self decision-making was not very welcome in the JNA. As Colonel Borislav Đukic the Commandant of the Knin Corps said: " I have to express some criticism about current military education in the JNA. Superior officers do not like self-initiative and self decision-making. Everything has to be done according to the scenario; SOP's must be

⁴⁷ [Colonel] Ljubodrag Stojanovic, "Ratnik i njegova parola", [A Soldier and His Slogan], *Narodna armija*, 6 November 1991, 9.

⁴⁸ Norman Cigar, "The Serbo-Croatian War, 1991: Political and Military Dimensions", *The Journal of Strategic Studies*, No 3, September 1993, 320.

⁴⁹ "To justify the necessity to mobilize more and more reservists the JNA leadership even claimed that in Vukovar were 12,000 to 15,000 thousand Croatian defenders," Ognjen Janevski "Bik više nema slame", ["The Bull Has No More Hay"] *Ilustrovana politika* (Belgrade), 9 October 1991, 5.

respected, we could not make our own decisions because of the rule that we had to rely on our senior officers.”⁵⁰

While there were also severe shortages in trained small unit infantry leaders, the situation in the armored units was so serious that the JNA had to rely on unskilled Territorial Defense personnel. A good number of the mobilized reservists had irrelevant expertise, and the JNA was forced to adapt on the fly.⁵¹ Poorly trained and poorly motivated personnel were extremely vulnerable when they had to fight alone in urban terrain, where the Croatian defenders had an absolute advantage.⁵² The armored forces complained about the lack of infantry trained to detect and report targets to tank commanders; the infantry, for its part, complained about a lack of air and artillery support.⁵³ Close air support was a particular problem, especially for fixed-wing aircraft, because the Air Force had never viewed this as a priority mission and, as the JNA Chief of Staff of the Air Force and Air Defense acknowledged, his aircraft were “not used according to the

⁵⁰ Quoted from Miladin Petrovic, “Od tampon zone do združenog boja” [From Buffer Zone to the Combined Arms Battle], *Narodna armija* (Belgrade), 28 November 1991, 20.

⁵¹ “We received the reservists from all over Serbia with inappropriate specialties, and we were forced to adapt them as soon as possible”, quoted from the interview with Col Vucic by Dozet, “Ti divni ljudi, mladi ratnici (2)”, 12.

⁵² For example, “They [i.e. the reservists] suffered heavy casualties from mortar shells. Right now we have only 20 of 120 men who set out originally with us as support to the tanks,” Ognjen Janevski “Bik više nema slame” [“The Bull Has No More Hay”] *Ilustrovana politika* (Belgrade), 9 October 1991, 4.

⁵³ M. Marjanovic and D. Glišić, “Visoka cena slobode” [The High Price of Freedom], *Narodna armija* (Belgrade), 21 September 1991, 10.

appropriate principles. That is, we fought in a way we did not train for... operating along the front lines, against snipers and mortars, and dealing with street fighting.”⁵⁴

One of Vukovar and Croatia’s major critical vulnerabilities at the time was its Air Force, which existed, essentially, only on paper. There was no problem with skilled pilots, because a number of Croatian pilots had already left the JNA, but the problem was the almost total lack of equipment. The only aircraft Croatia had at the time were the old and slow Russian AN-2 biplanes used for agricultural and parachuting purposes and some small sports aircraft. These were not equipped with modern navigation and night-flying devices, or with appropriate bombing equipment. Despite those obstacles, a handful of Croatian pilots were able to undertake a total of forty-nine combat flights over the Vukovar area, delivering medical supplies and, later, bombing enemy positions.⁵⁵ Those air raids, of course, could not provide major military support to the defenders in Vukovar, but did have a huge psychological impact on both the defenders and the enemy.

⁵⁴ Quoted in interview with Major General Ljubomir Bajic by S. Nedeljkovic, “Vazduhoplovstvo po meri nove države” [An Air Force Appropriate to the New State], *Narodna armija*, (Belgrade), 21 May 1992, 18.

⁵⁵ The bombs were made of gas cans, boilers, etc., with attached balance flaps, and were filled with explosive and cut iron bars. A PVO-40 missile delivered especially for that purpose by Russia shot one of these few aircraft down.

Logistics and Lines of Communication

Logistics proved problematic for both the Croatian defenders and the JNA. JNA supplies came along extended lines, and the Croatian defenders, using small strike teams, were able to successfully cut off JNA road columns. For the Vukovar defenders, this was very important, not least because sometimes attacking JNA convoys was the only way they could obtain weapons, ammunition, and food. Of course, such operations also had a significant impact on morale for both sides. Even without such impediments, internal bottlenecks also led to logistic shortfalls for the JNA, with reservists complaining about ineffective food distribution, defective equipment and munitions, and the lack of spare parts.⁵⁶

Vukovar civilians were one of the Croatian defenders' most critical vulnerabilities.⁵⁷ Some men in Vukovar received the order from the commander and from civilian authorities to organize life under the siege in the whole sector, no matter the intensity of the battle, and they did it.

⁵⁶See Cigar, "The Serbo-Croatian War, 1991: Political and Military Dimensions", 321.

⁵⁷ During the Battle of Vukovar in the town were about 12,000 civilians. No one was left to suffer on purpose, whether Croat, Serb or any other nationality.

During the battle, civilians lived in the shelters in Vukovar's underground. Most of city's buildings had some underground chambers; some institutions had nuclear strike shelters, some factories had big underground storage areas and most of the people found shelter there.

Supply was well organized, under the circumstances; the city's water system continued to function, firemen were constantly on duty; electrical power was provided to all vital institutions. Gasoline was provided until the reserves were exhausted; after that, destroyed vehicles were the main source of gasoline. Public kitchens provided a few thousand meals per day; Vukovar hospital, the busiest institution in these days, was on alert around the clock, and Croatian Radio Vukovar sent out reports, almost up to the last minute. Even burials were done whenever possible.

The only line of communication for the Croatian defenders was the so-called "Corn Road." All supplies and reinforcements came in through this line: personnel, medical supplies, food, weapons, and ammunition. Passing this road was really dangerous because it was always covered by fire by the JNA, and during this period twenty-five men were killed attempting to deliver supplies to Vukovar. Every delivery was more dangerous than the one before, and the route finally became impassable. This very

unsafe line of communication continued to be the only link for Vukovar with the rest of Croatia until the fall of the village of Marinci on 1 November. After the fall of this decisive point the Vukovar defenders, literally, were on their own.

Training

Another critical vulnerability for both sides was poor training for the Serb reservists, and no training at all for the Croatian defenders. To refresh the skills and capabilities of personnel possessing, for example, armor specialty requires by the book ten days of training at the very least. Instead, in some cases, training for JNA reservists lasted only four or five days prior to their departure for the front. They were even assigned to equipment they had never seen before, which led, according to the JNA sources, to catastrophic results.⁵⁸ There were also reports that some infantry personnel wounded themselves because they did not know how to shoot or to throw hand grenades.⁵⁹ A lack of adequate leadership among

⁵⁸ M. Sekulic, "Propusti kao opomena" [Oversights as a Warning], *Narodna armija*, (Belgrade) 2 October 1991, 46.

⁵⁹ Interview by Rajko Lukac with Serbian veteran Milan Cvijic, "Cestitke uz pratnju artiljerije" [Congratulations Accompanied by Artillery], *Spona* (Frankfurt, Germany), 15-22 April 1993, 8.

JNA officers, caused by the departure from the JNA of the non-Serbs, exacerbated this problem.⁶⁰

On the other hand, the majority of the Croatian defenders had no training at all. The 1,100 Vukovar defenders who were local inhabitants did not have the time for any kind of refresher training. Many had previous experience while serving in the former JNA as conscripts. Some of them, because of their age, had had no training for years. The only trained defense forces were a few hundred guardsmen and policemen, but until 31 of August, when two professional soldiers, the future commandant and his deputy, arrived in Vukovar, there was no professionally organized defense.

This battle also highlights other enduring realities like the importance of small unit leadership, especially in Military Operations in Urban Terrain (MOUT). Thanks to that, Croatian defenders were able to resist the enemy for three months until the JNA leadership realized the benefit of small units and their leaders

⁶⁰ As one Serbian soldier noted, "organization was hopeless, no one knew what to do or where to be..." Lukac, "Cestitke uz pratnju artiljerije" [Congratulations Accompanied by Artillery], *Spona* (Frankfurt, Germany), 15-22 April 1993, 8.

Culminating Points

During the siege of Vukovar the JNA had two culminating points and those were the dates of 24 to 28 August, and 14 September 1991 when they initiated their two most intense attacks, attempting to break through the resistance without success. The price they paid was high, and the JNA retaliated with massive artillery barrages and air raids.

The culminating point for the Croatian defenders was on Sunday, 17 November. On that day the defenders found themselves literally without a single remaining anti-tank shell, with almost no ammunition for their infantry weapons and then they realized that further resistance was futile. The city of Vukovar surrendered the next day, 18 November 1991 after 109 days of heroic resistance.

Conclusion

The Battle of Vukovar was the key battle in Croatia's Homeland War. By tying down the enormous Serbian military machine for several months, the defenders of Vukovar gave Croatia priceless time and space to create an Army sufficiently equipped and capable to defend newly born Croatia.⁶¹ And, by neutralizing enormous amounts of Serbian manpower and equipment, the defenders weakened the

⁶¹ General Anton Tus, former Chief of General Staff of the Croatian Army "Bitka za Vukovar" [The Battle for Vukovar], *Jutarnji List*, (Zagreb) 1993.

aggressor military, politically, and psychologically. The Battle of Vukovar in particular, demonstrated the limits of Serbian national will. It was clear that training, command and control, logistics support and morale were very low, and after Vukovar the JNA could never again mobilize significant numbers of reservists.⁶²

The political impact of the battle was immeasurably important. World opinion finally became more sympathetic to the Croatian cause. The attacks on Dubrovnik, although much less bloody, had garnered greater international support for Croatia's cause up to then. The greater publicity for Dubrovnik was because of the city's fame as a tourist and cultural center. However, the situation changed significantly after the fall of Vukovar, when the pictures of the expelled inhabitants and of the completely destroyed city horrified world opinion.⁶³ As Croatia's President Franjo Tudman noted of the terrible images of Vukovar: "This was how we successfully turned the international

⁶² According to a senior Serb official, Borisav Jovic "A few days ago, they [the JNA General Staff] said that 6 more brigades (30,000 men) will be enough to win. Now they're requesting a total mobilization. Serbia and Montenegro have total of 1,500,000 combat-ready men. To mobilize all of them? Croatia has 200,000 defenders only. Why do we need an army of that size?" Borisav Jovic, *Poslednji dani SFRJ* [The Last Days of Yugoslavia] (Belgrade: Politika, 1995), 391-392.

⁶³ In Vukovar, a few brave Croatian journalists continued to report throughout the siege, but there were no international correspondents. However, Croatian journalists, especially the reports by legendary Radio Vukovar reporter Siniša Glavašević, who was killed by the Serbs, were highly appreciated by the Croatian community, but it was the reports and pictures after fall of the city really shocked the world.

community to our side, and finally achieved international recognition for Croatia."⁶⁴

⁶⁴ Quoted from President Tudman's speech "Rat će uskoro završiti" [The war Will End Soon], Vjesnik, 23 December 1991, 7.

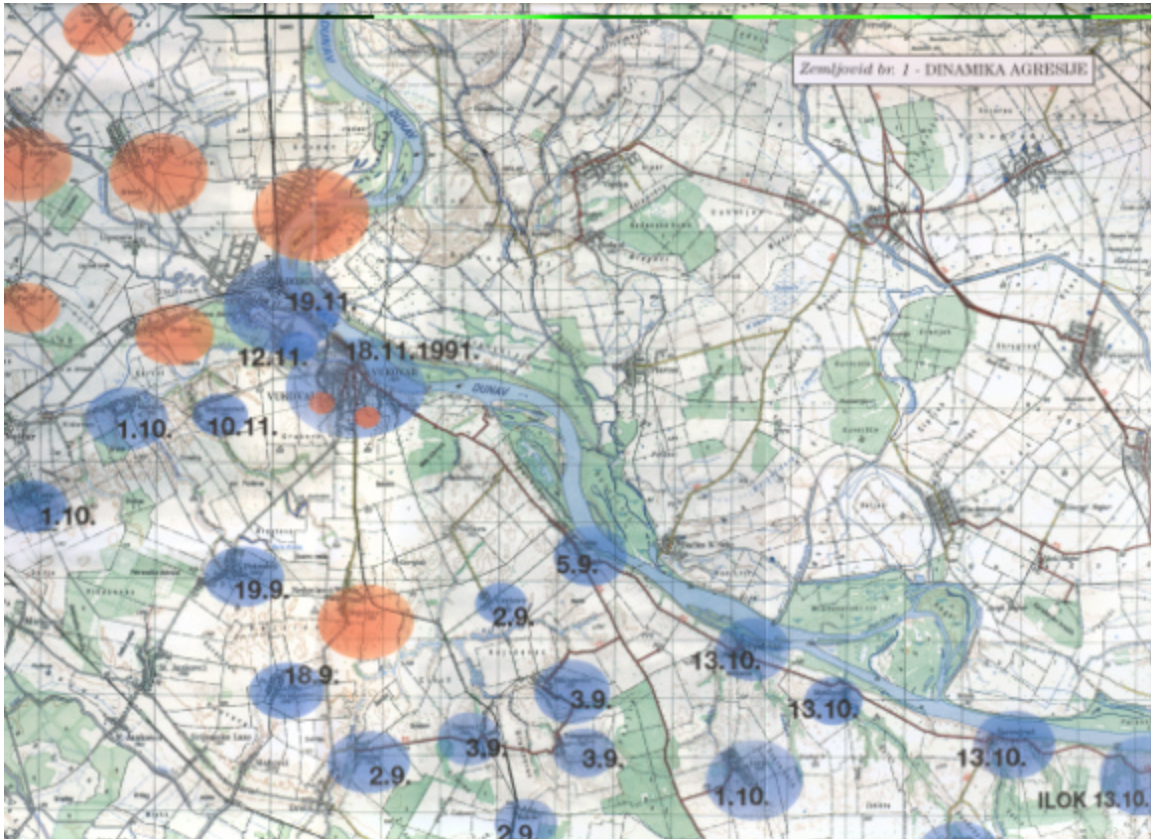


FIGURE 1

The Dynamics of the JNA's Advancing in the Vukovar Area.

Red - Surrounding villages with the Serbian Croats Majority.
Blue - The JNA's and Paramilitary Forces Dynamics of Advancing from September until November 1991.

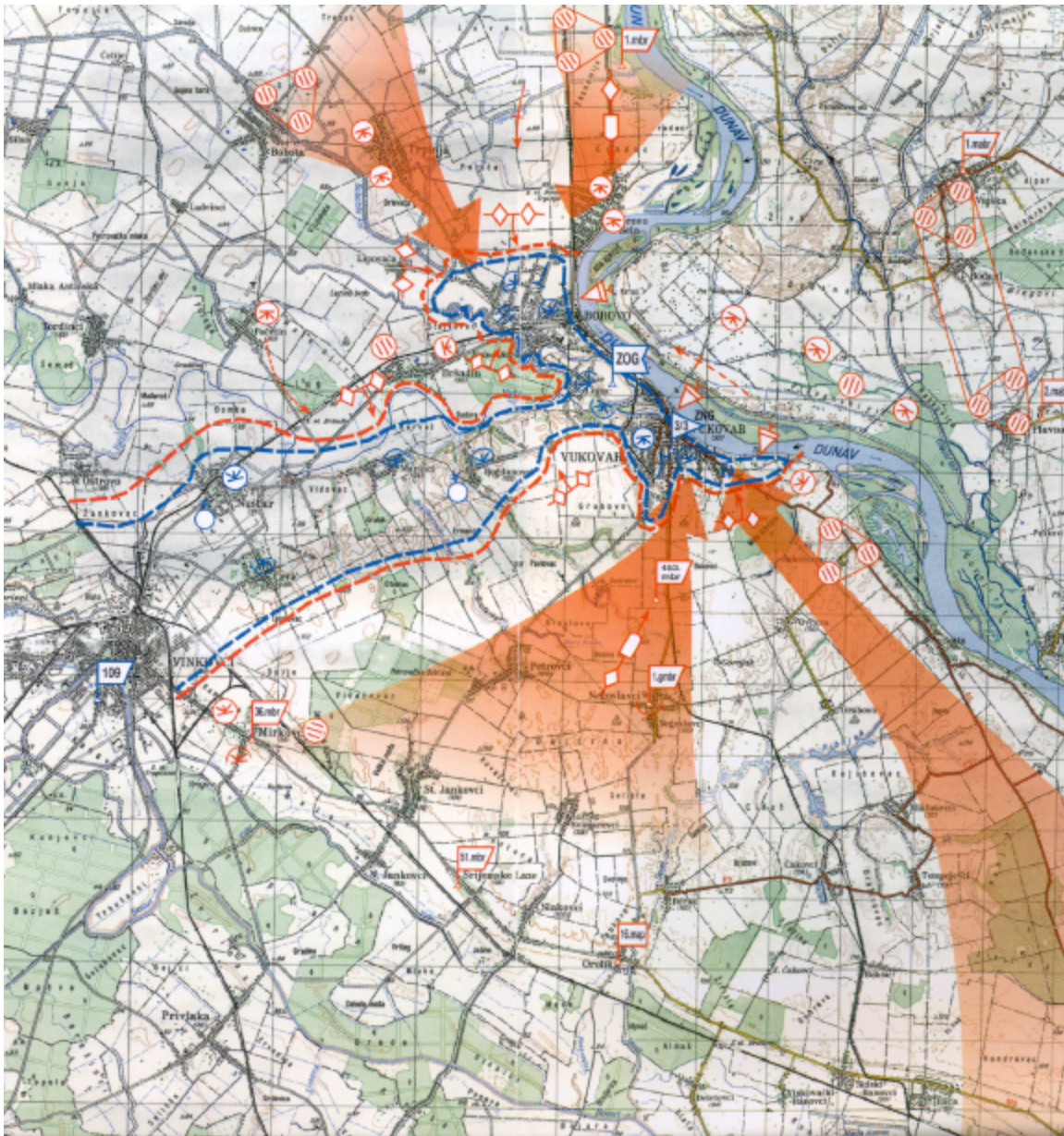


FIGURE 2

**Forces Ratio - Croatian Defenders and the JNA positions
with JNA's Avenues of Approach and Croatian Defense Lines
on 1st of September 1991**

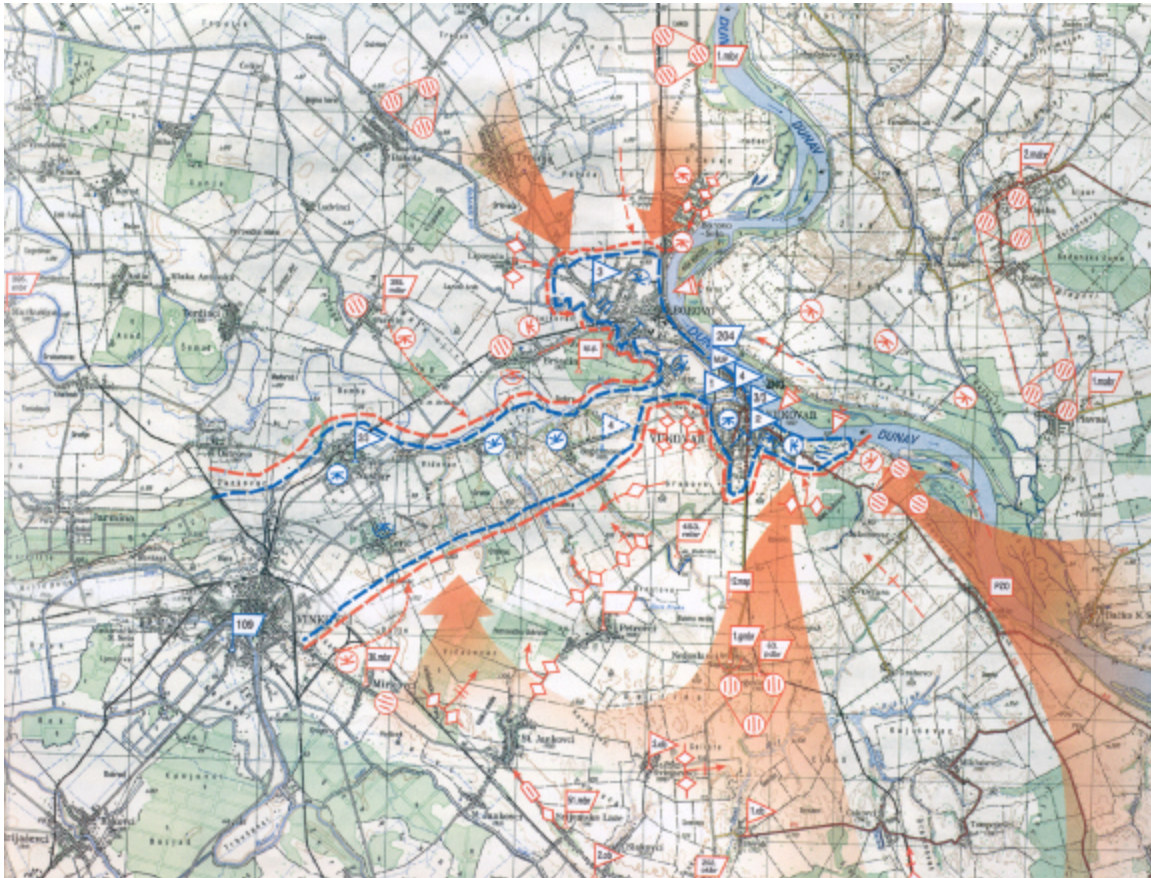


FIGURE 3

**Forces Ratio - Croatian Defenders and the JNA's positions
with JNA's Avenues of Approach and Croatian Defense Lines
on 14th of September 1991**

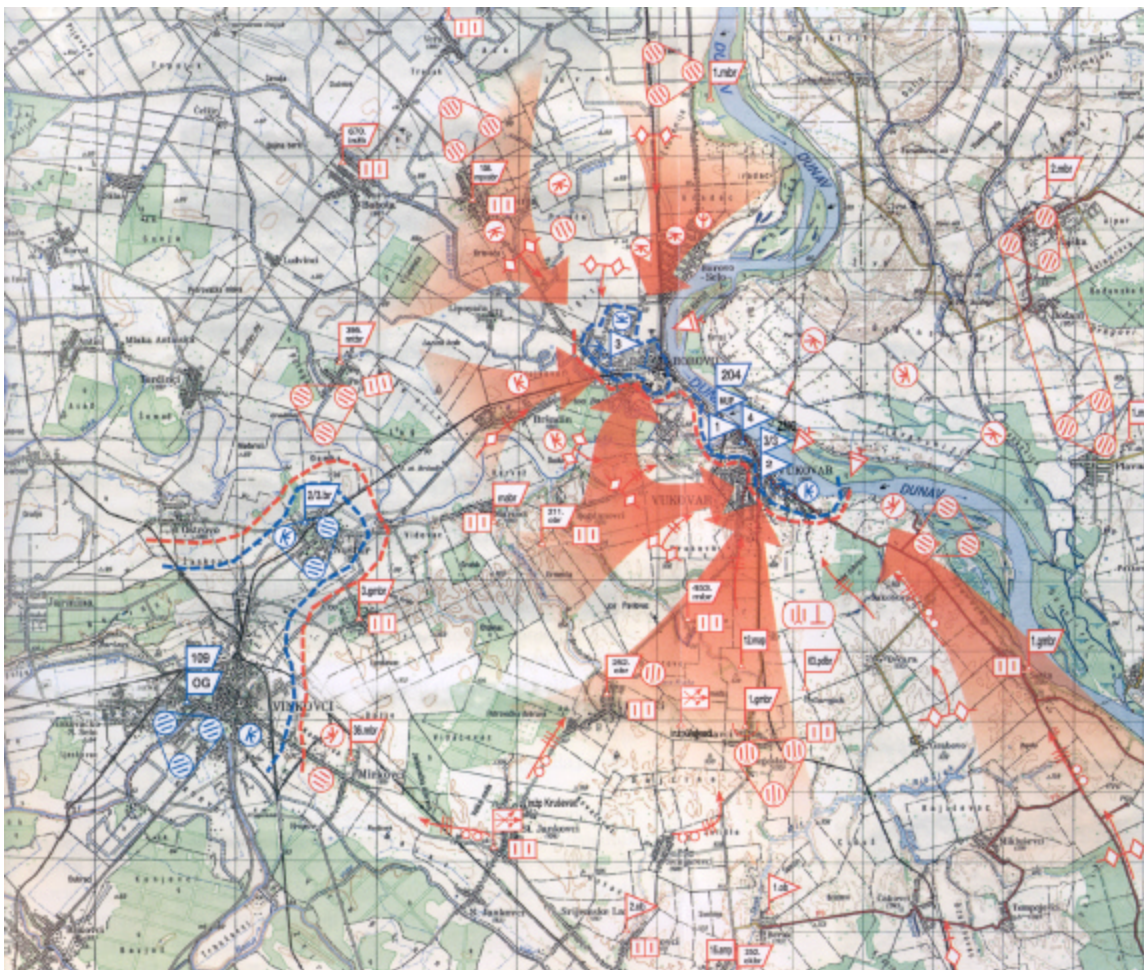


FIGURE 4

**Forces Ratio - Croatian Defenders and the JNA's positions
during the last week of Croatian Resistance - 10th - 18th
November 1991**

WORKING BIBLIOGRAPHY

Books

1. Dedakovic Mile -Jastrebo, Mirkovic-Nad Alenka and Runtic Davor, *Bitka za Vukovar* [The Battle for Vukovar], (Vinkovci: Vinkovacke jeseni d.o.o, FWT, 1997).
2. Jovic Borisav, *Poslednji dani SFRJ* [The Last Days of Yugoslavia - the Extracts from the Diary], (Belgrade: Politika 1995).
3. Kadijevic Veljko, *Moje videnje raspada* [My View of the Collapse] (Belgrade: Politika, 1993)
4. Magaš Branka, *The Destruction of Yugoslavia: Tracking the Break-up 1980-92* (London: Verso 1993)
5. Magaš Branka and Žanic, Ivo (Editors), *The War in Croatia and Bosnia-Herzegovina 1991-1995*, (Portland, OR: Frank Cass Publishers 2001)
6. Špegelj Martin, *Sjecanja vojnika* [Soldier's Memoirs], (Zagreb, Znanje d.d.2001)
7. Williams Paul and Cigar Norman *A Prima Facie Case for the Indictment of Slobodan Milošević* (London: Alliance to Defend Bosnia-Herzegovina, 1996)

Articles

- a) Krsnik Vjekoslav, "Hrvatska i dalje racuna na podršku svijeta" [Croatia Still Continues to Rely on the World's Support] *Nedjeljni Vjesnik* (Zagreb) 3 February 1991.
- b) [Maj.] Kadijevic Veljko B., "Izmedju umeca i sile", [Between Skill and Force], *Vojska* (Belgrade), 4 May 1995.
- c) Pantelic, Milorad, "Dragocen doprinos ratnoj veštini" [A Precious Contribution to the Art of War] *Narodna armija*, (Belgrade) 30 December 1991
- d) Goldstone, Richard J. (prosecutor), "The Indictment of the Prosecutor of the ICTY in Hague against Mile Mrkšić, Miroslav Radic, and Veselin Šljivancanin, the commanding JNA officers during the seizure of Vukovar", (The Hague, Netherlands) 1995.
<http://www.un.org/icty/indictment/english/mrk-ii951107e.htm>
- e) Cigar, Norman, Croatia's War for Independence: The Parameters of War Termination. *The Journal of Slavic Military Studies*, No.2 June 1997.
- f) Cigar, Norman, The Serbo-Croatian War, 1991: Political and Military Dimensions, *The Journal of Strategic Studies*, No 3, September 1993.
- g) Višnar, Fran, 1800 heroes that saved the Croatia, *Nedjeljna Dalmacija*, (Split) 17 November 1993.
- h) Gajic-Glišić, Dobrila, *The minutes are those, NIN*, (Belgrade) especially 24 April 1992.
- i) Stevanovic, Nenad, "Proces generalu Trifunovicu; Izdajnik ili pokojnik" {General Trifunovic's Trial; Traitor or Deceased?}, *Vreme*, (Belgrade) 13 April 1992.
- j) Canak Nenad, "Doživljaji vojnika Canka" [The Impressions of Soldier Canak], *Vreme*, (Belgrade) 23 December 1991.
- k) Dozet Dušan, Ostojic Nikola, and Damjanov Pero, "Ti divni ljudi, mladi ratnici (2)" ["Those Wonderful

- People, Young Soldiers"], *Narodna armija*, (Belgrade) 25 Dec. 1991.
- l) Janevski, Ognjen "Vojska ovamo još nije došla" [The Army Still Has Not Come Here], *Ilustrovana politika*, (Belgrade) 9 October 1991.
 - m) Stojanovic Ljubodrag, "Ratnik i njegova parola", [A Soldier and His Slogan], *Narodna armija*, (Belgrade) 6 November 1991.
 - n) Janevski Ognjen "Bik više nema slame", ["The Bull Has No More Hay"] *Ilustrovana politika*, (Belgrade) 9 October 1991.
 - o) Marjanovic M. and Glišić D., "Visoka cena slobode" [The High Price of Freedom], *Narodna armija*, (Belgrade) 21 Sept. 1991.
 - p) Sekulic M., "Propusti kao opomena" [Oversights as a Warning], *Narodna armija*, (Belgrade) 2 October 1991.
 - q) Lukac Rajko, an interview with Serbian veteran Milan Cvijic, "Cestitke uz pratnju artiljerije" [Congratulations Accompanied by Artillery], *Spona* (Frankfurt, Germany), 15-22 April 1993.
 - r) Tus Anton, "Bitka za Vukovar" [The Battle for Vukovar], *Jutarnji list*, (Zagreb) 1993.

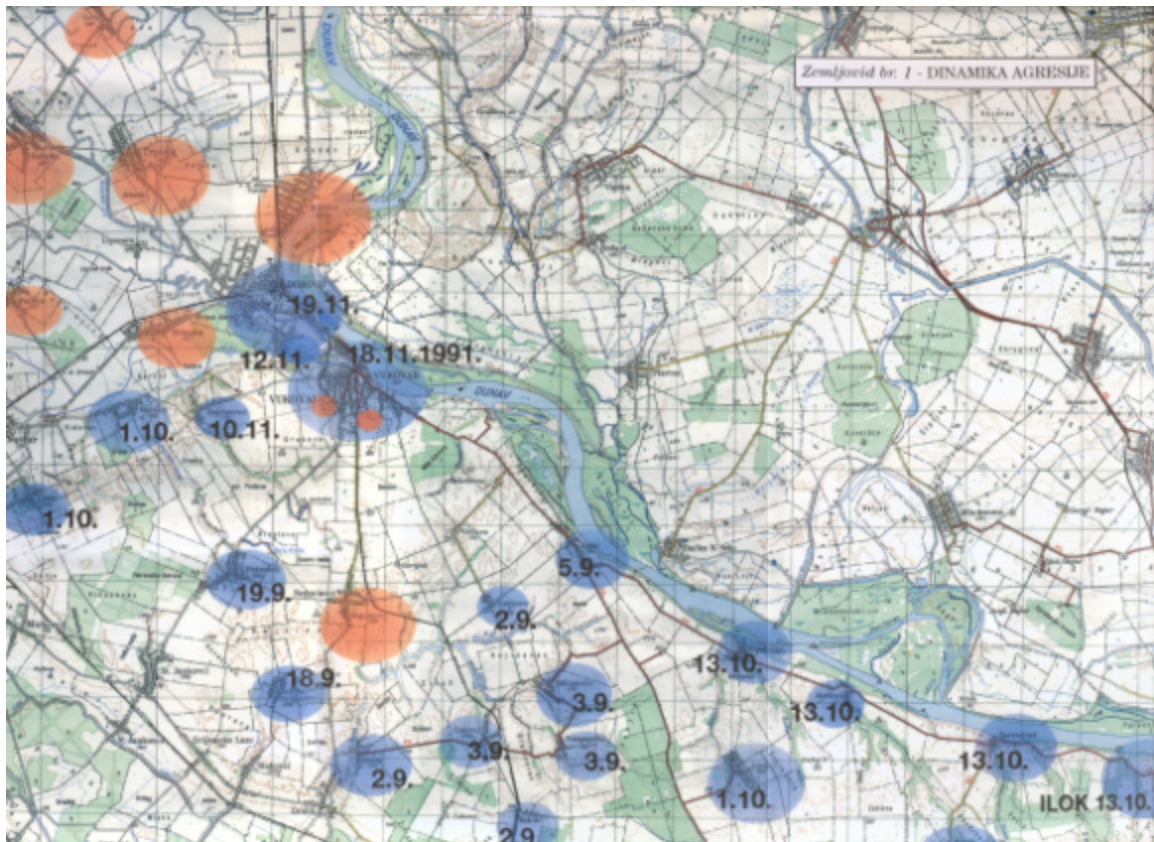


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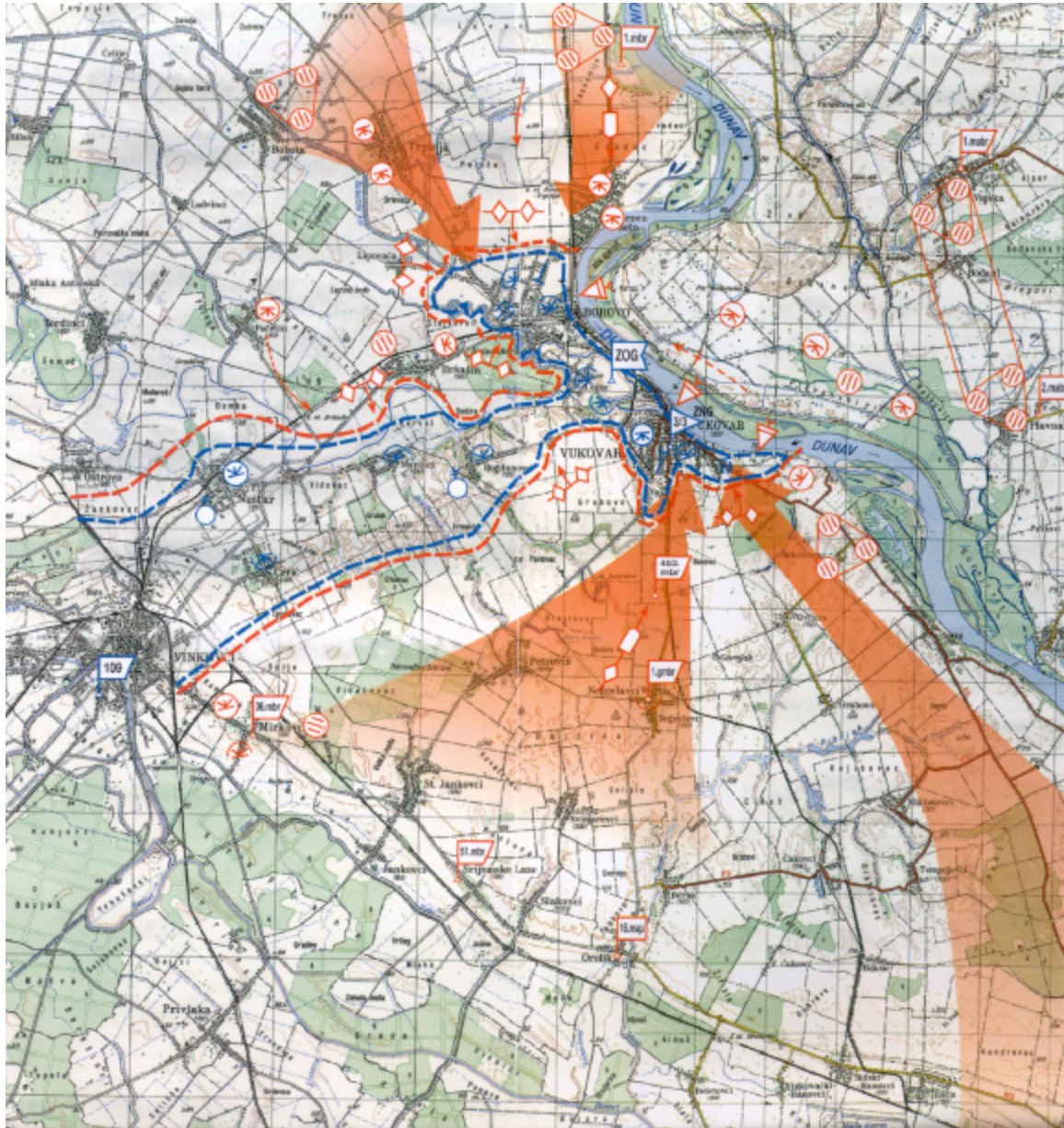


Figure 2

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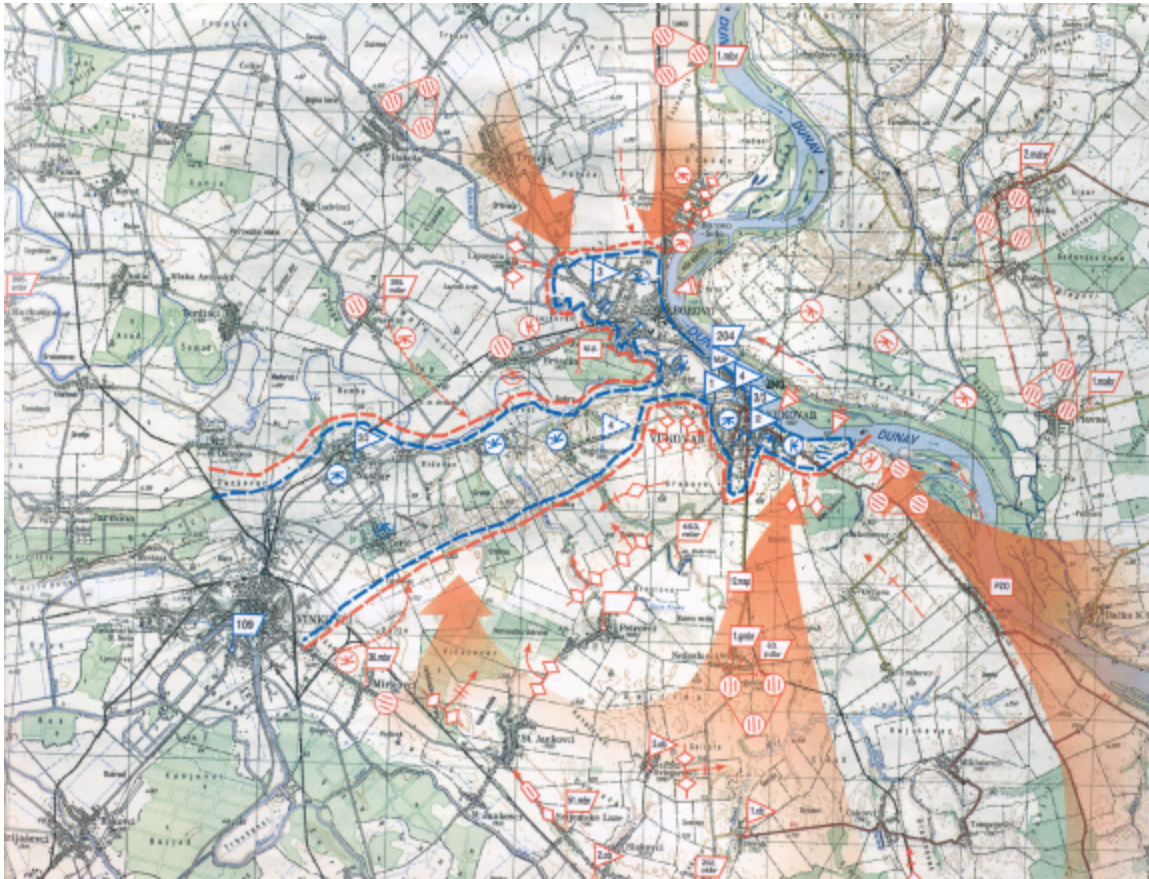


Figure 3

**Forces Ratio - Croatian Defenders and the JNA's positions
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on 14th of September 1991**

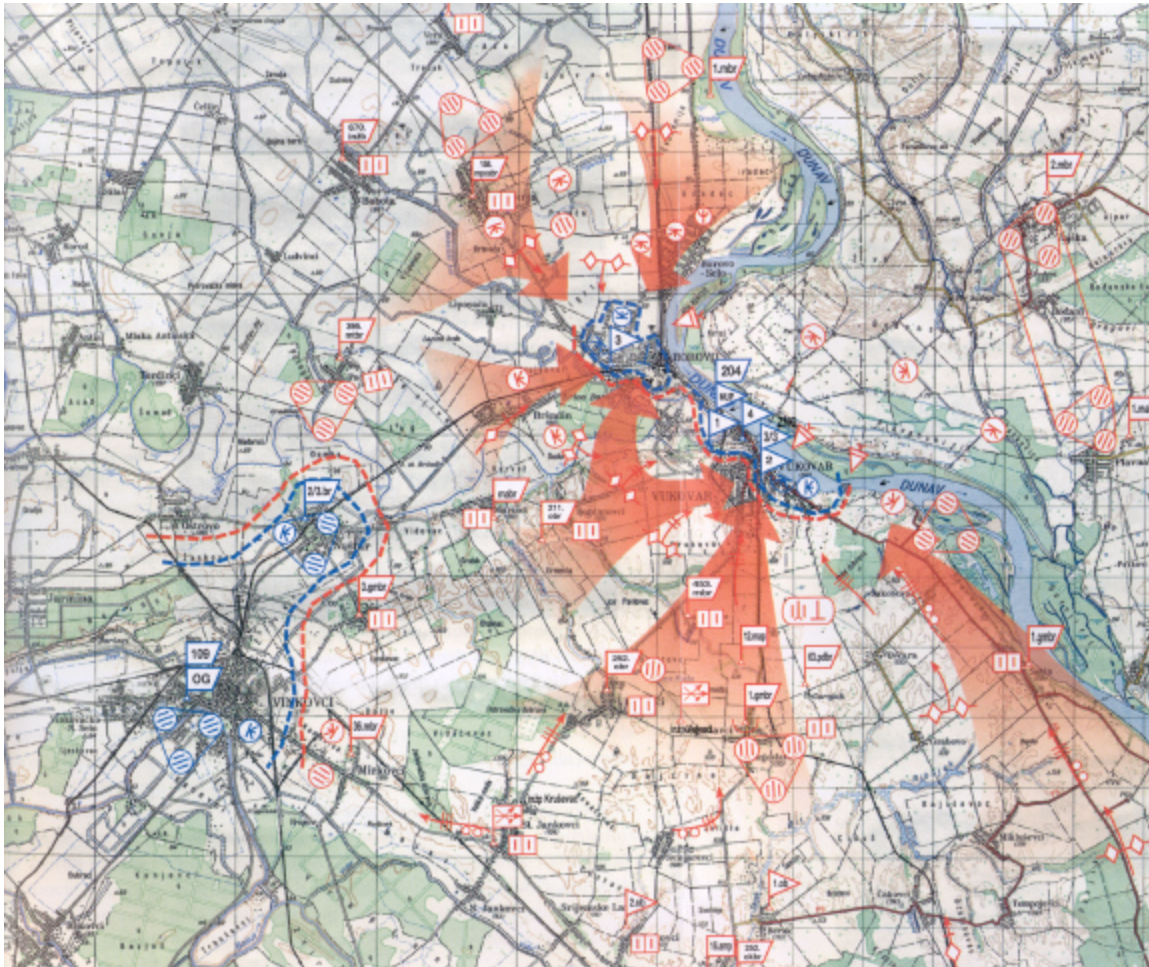


Figure 4

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